



# MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

**December 15, 2017**

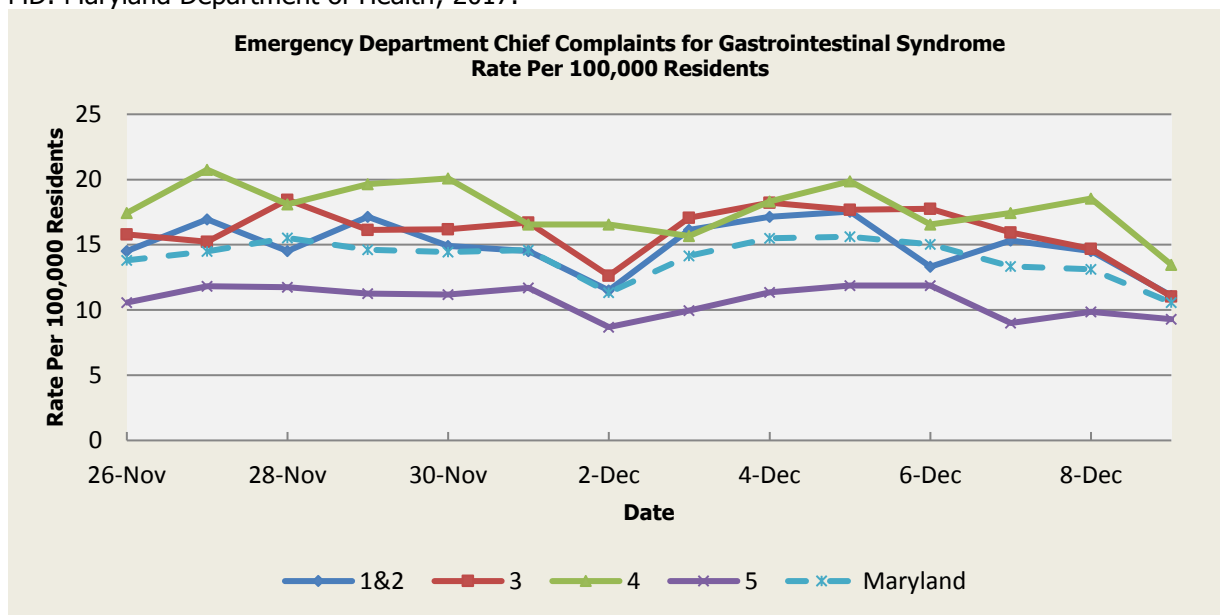
## Public Health Preparedness and Situational Awareness Report: #2017:49 Reporting for the week ending 12/09/17 (MMWR Week #49)

### **CURRENT HOMELAND SECURITY THREAT LEVELS**

**National:** No Active Alerts  
**Maryland:** Normal (MEMA status)

### **SYNDROMIC SURVEILLANCE REPORTS**

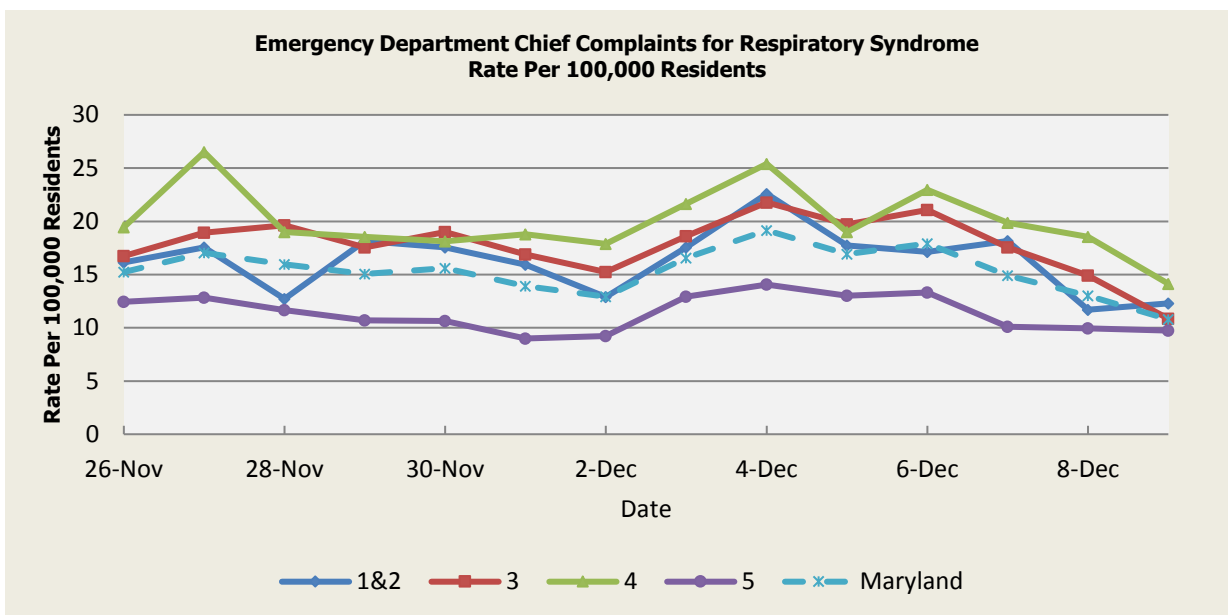
**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):** Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There were five (5) Gastrointestinal Syndrome outbreaks reported this week: two (2) outbreaks of Gastroenteritis in Nursing Homes (Region 4); one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 5); one (1) outbreak of Gastroenteritis associated with Private Homes (Region 5); one (1) outbreak of Gastroenteritis/Foodborne associated with a Restaurant (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.94	15.08	15.50	1.02	1.30
Median Rate*	12.91	14.80	15.02	10.22	12.95

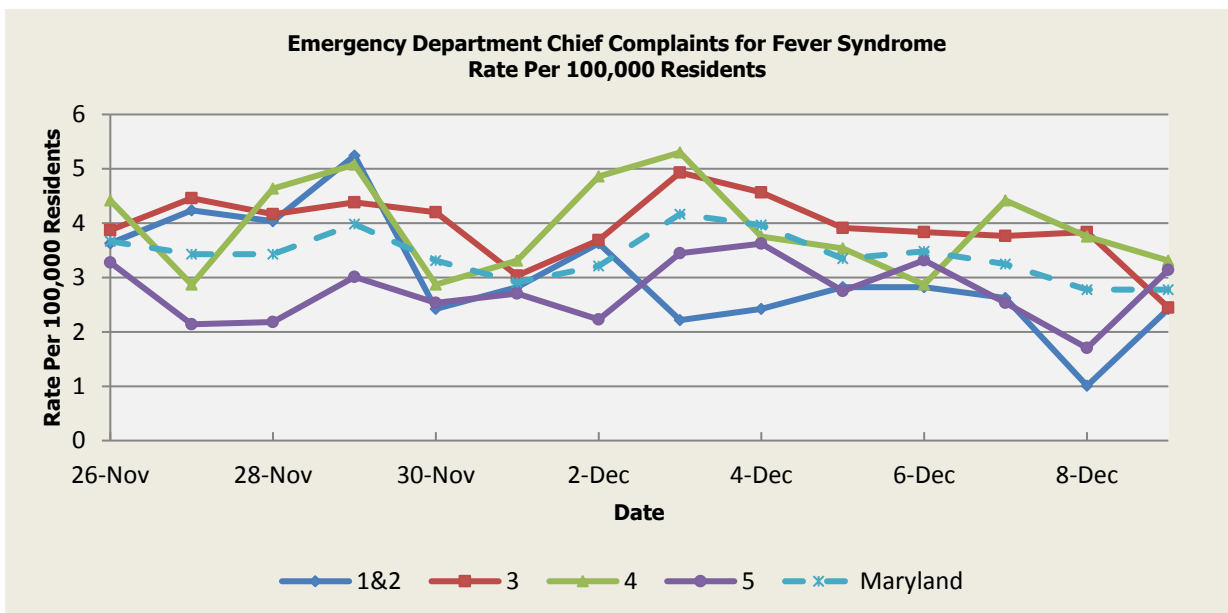
\* Per 100,000 Residents



There was one (1) Respiratory illness outbreak reported this week: one (1) outbreak of Influenza in a Nursing Home (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.08	14.44	14.39	9.87	12.49
Median Rate*	11.70	13.88	13.91	9.65	12.05

\* Per 100,000 Residents

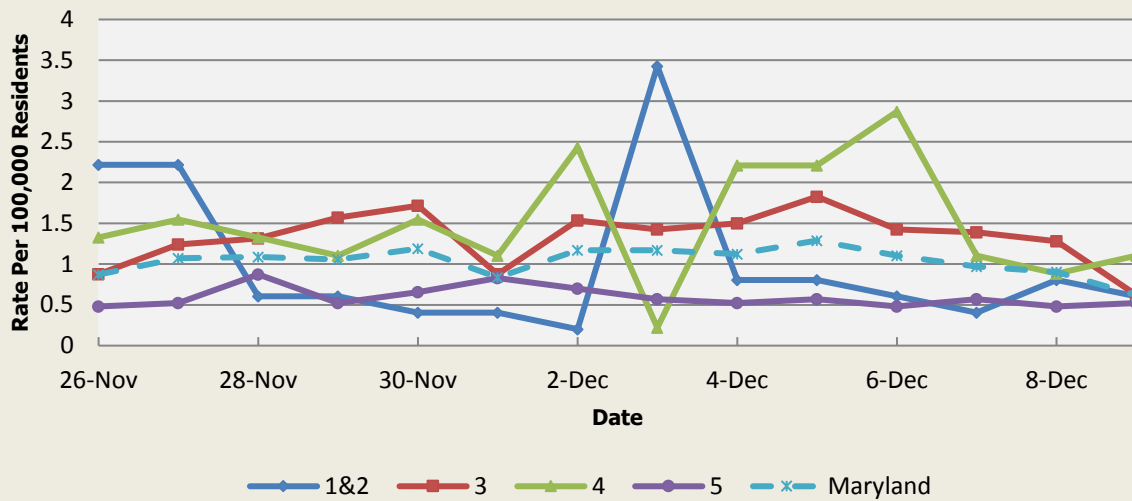


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.99	3.85	3.96	3.04	3.48
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

**Emergency Department Chief Complaints for Localized Lesion Syndrome  
Rate Per 100,000 Residents**



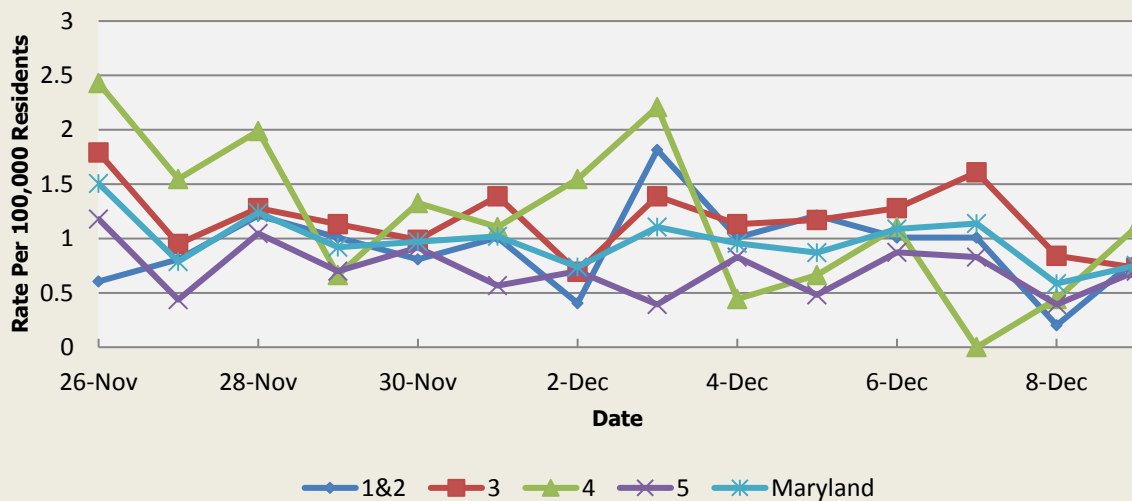
There were no Localized Lesion Syndrome outbreaks reported this week.

**Localized Lesion Syndrome Baseline  
Data  
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.05	1.88	2.04	0.95	1.47
Median Rate*	1.01	1.83	1.99	0.92	1.42

\* Per 100,000 Residents

**Emergency Department Chief Complaints for Rash Syndrome  
Rate Per 100,000 Residents**

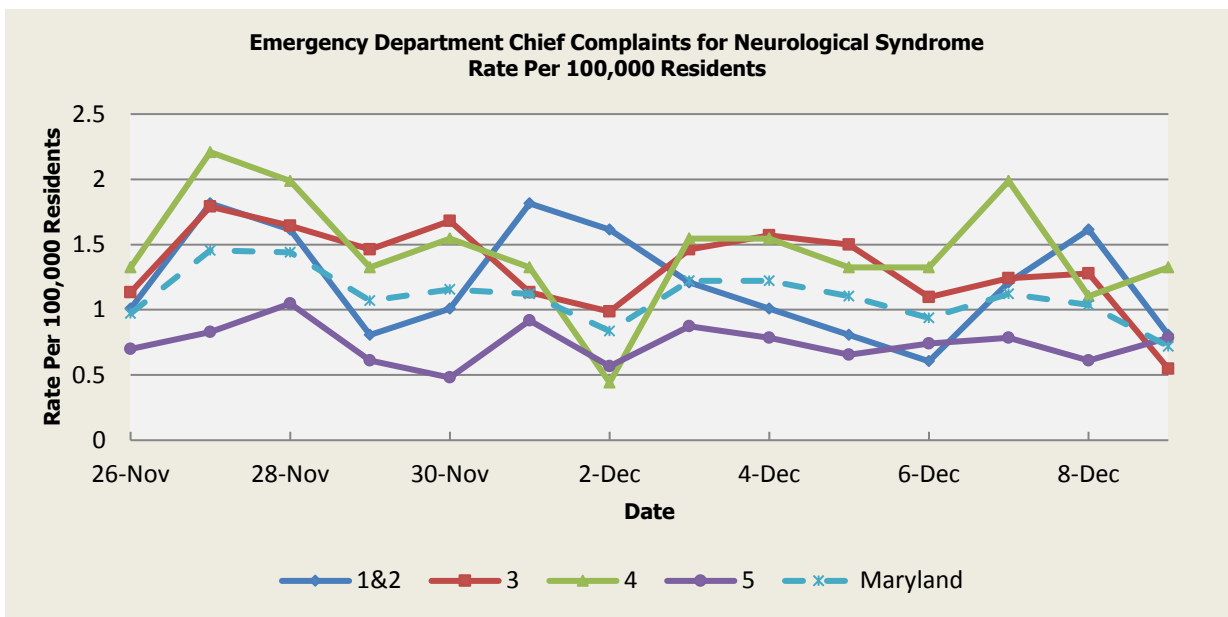


There were two (2) Rash Syndrome outbreaks reported this week: one (1) outbreak of Hand, Foot, and Mouth Disease associated with a School (Regions 3); one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Regions 3).

**Rash Syndrome Baseline Data  
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.23	1.74	1.77	1.02	1.42
Median Rate*	1.21	1.68	1.77	1.00	1.39

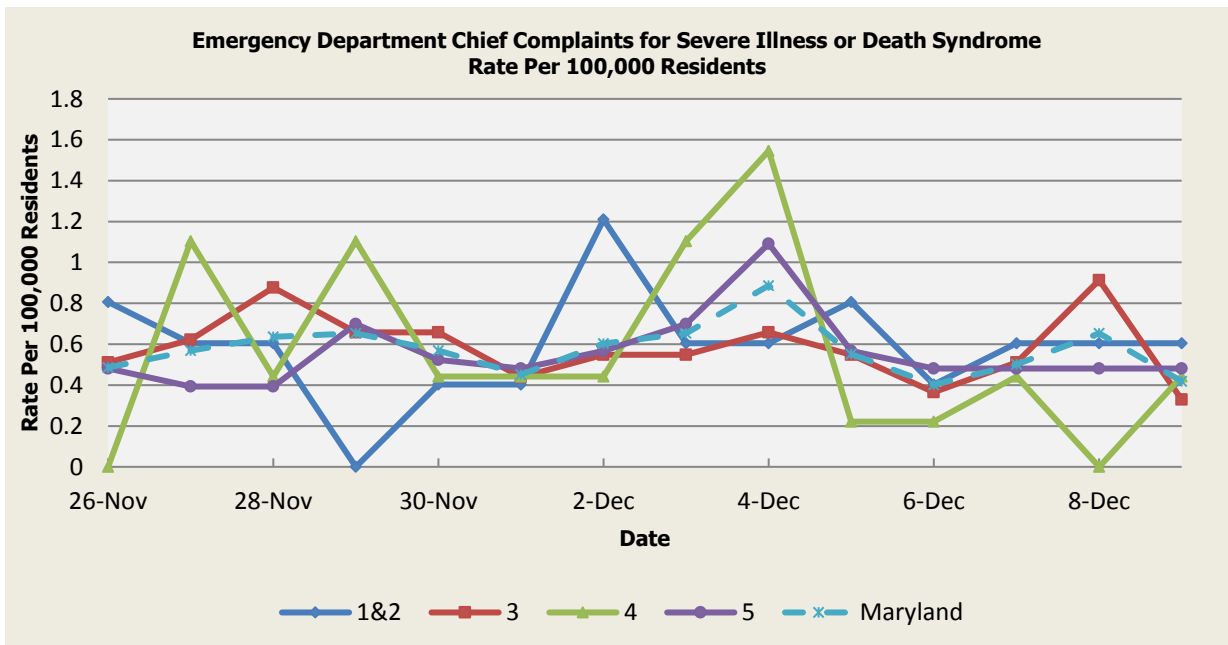
\* Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.69	0.84	0.74	0.53	0.70
Median Rate*	0.60	0.69	0.66	0.48	0.59

\* Per 100,000 Residents

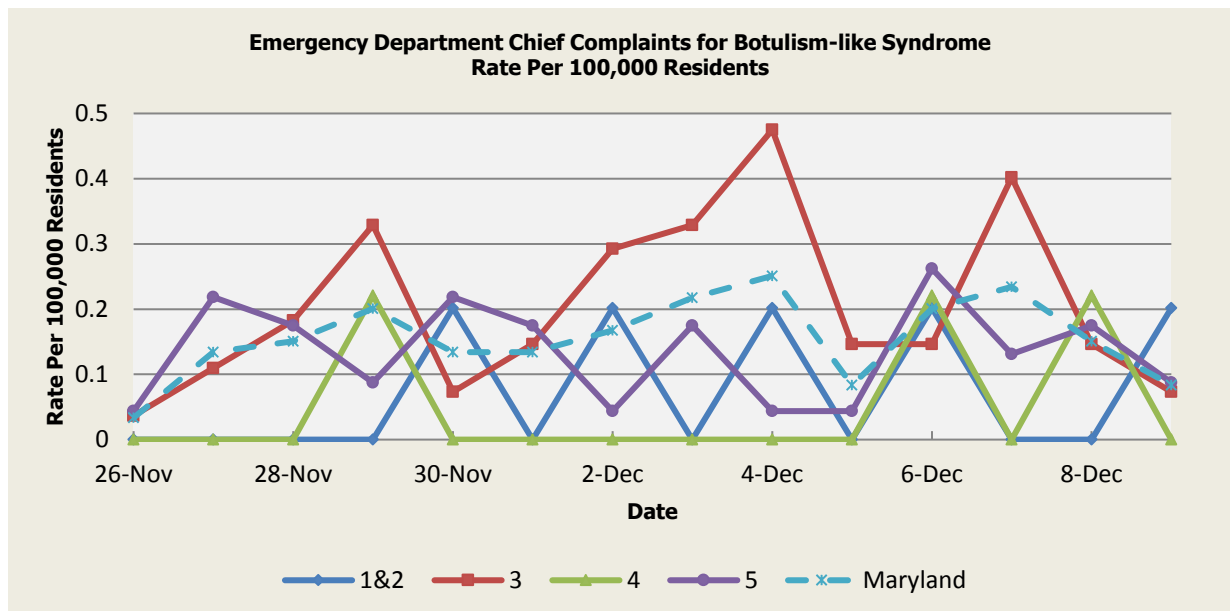


There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.90	0.80	0.46	0.70
Median Rate*	0.60	0.91	0.66	0.44	0.70

\* Per 100,000 Residents

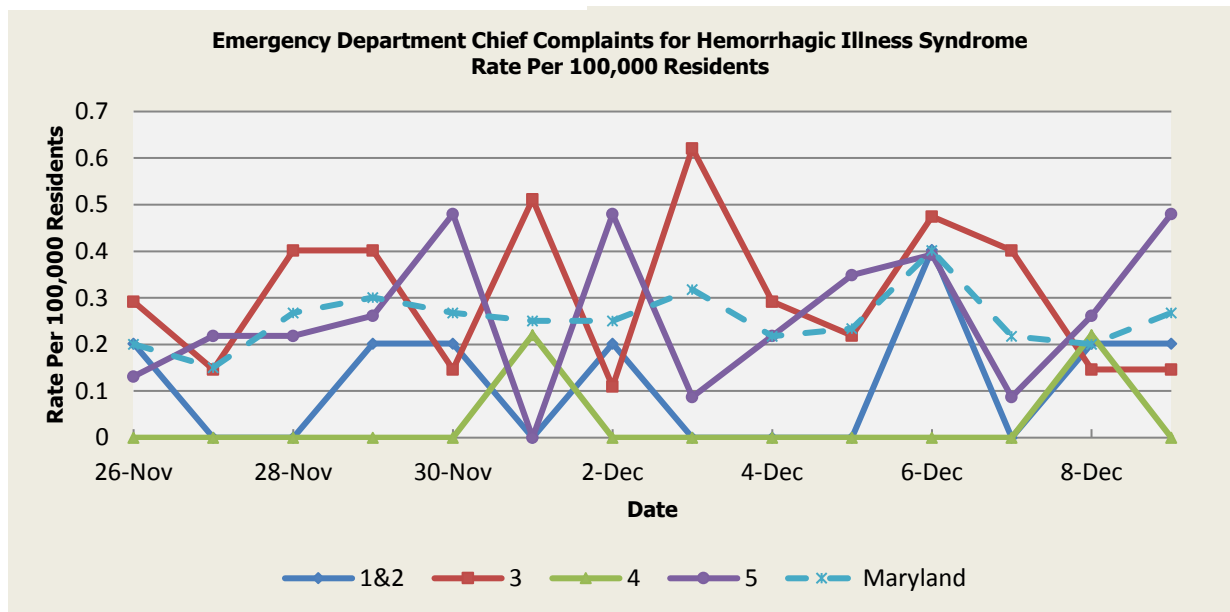
## SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 11/27 (Region 5), 11/28 (Region 5), 11/29 (Regions 3,4), 11/30 (Regions 1&2,5), 12/01 (Region 5), 12/02 (Regions 1&2,3), 12/03 (Regions 3,5), 12/04 (Regions 1&2,3), 12/06 (Regions 1&2,4,5), 12/07 (Regions 3,5), 12/08 (Regions 4,5), 12/09 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.10	0.05	0.06	0.08
Median Rate*	0.00	0.07	0.00	0.04	0.05

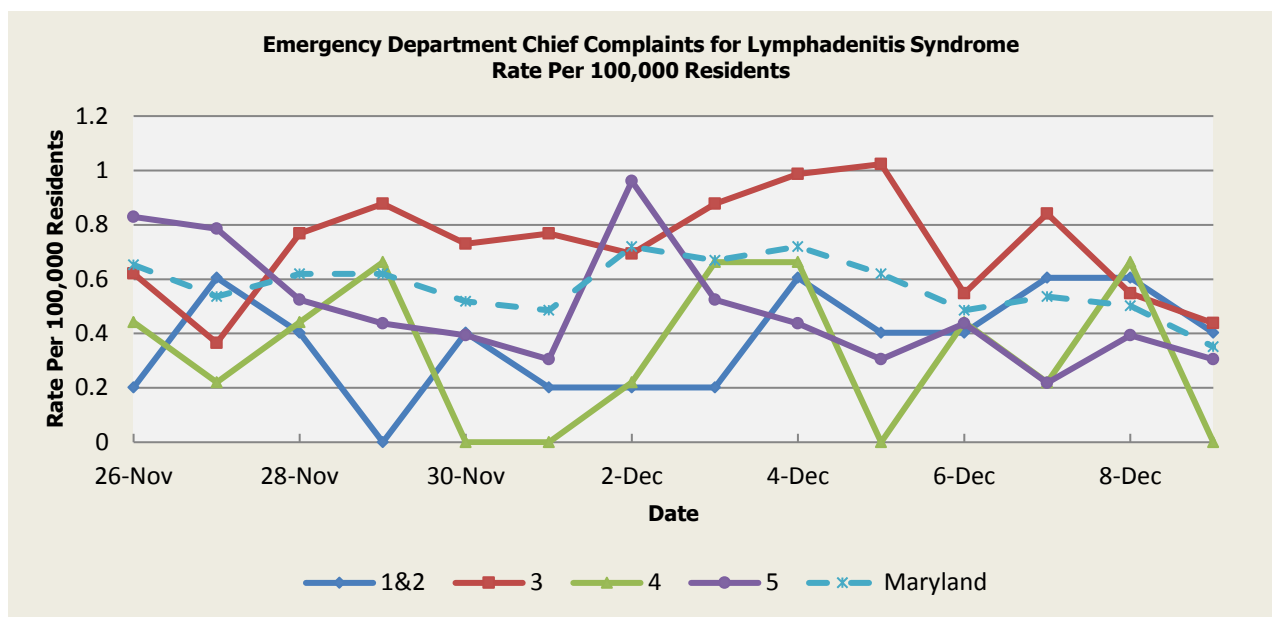
\* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 11/26 (Regions 1&2,3), 11/27 (Region 5), 11/28 (Regions 3,5), 11/29 (Regions 1&2,3,5), 11/30 (Regions 1&2,5), 12/01 (Regions 3,4), 12/02 (Regions 1&2,5), 12/03 (Region 3), 12/04 (Regions 3,5), 12/05 (Region 5), 12/06 (Regions 1&2,3,5), 12/07 (Region 3), 12/08 (Regions 1&2,4,5), 12/09 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.13	0.03	0.10	0.10
Median Rate*	0.00	0.04	0.00	0.04	0.05

\* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 11/26 (Regions 1&2), 11/27 (Regions 1&2), 12/02 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.32	0.55	0.36	0.34	0.43
Median Rate*	0.20	0.40	0.22	0.26	0.33

\* Per 100,000 Residents

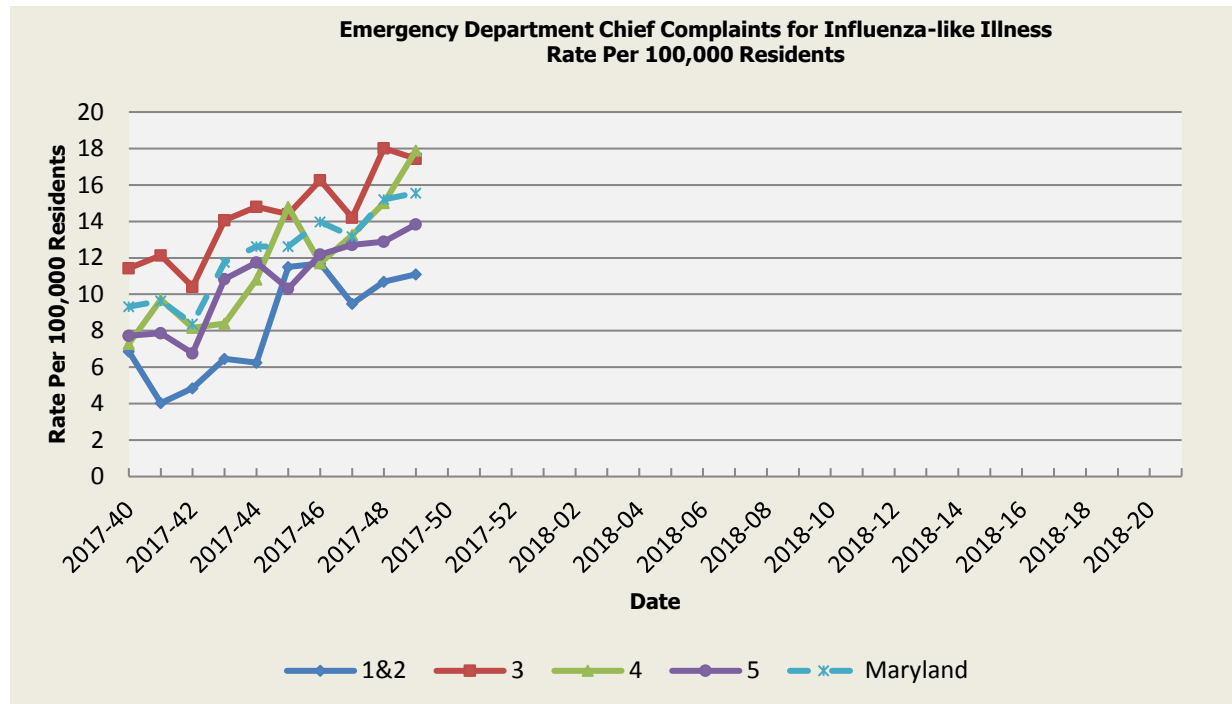
## MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	December			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Meningococcal disease	0	0.2	0	8	4.6	4
Measles	0	0	0	4	5.2	4
Mumps	0	0.4	0	24	43.6	24
Rubella	0	0.2	0	1	5.6	5
Pertussis	2	13.2	13	204	350	369
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Salmonellosis	7	13	12	853	911.8	915
Shigellosis	0	4.8	2	233	203.2	221
Campylobacteriosis	11	15.6	15	832	745	747
Shiga toxin-producing Escherichia coli (STEC)	3	2.4	2	192	149.6	144
Listeriosis	1	0.4	0	28	17.4	16
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*
West Nile Fever	0	0.2	0	4	14.6	13
Lyme Disease	33	47.4	51	3261	2992.8	2794
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Chikungunya	0	0.2	0	0	11.2	0
Dengue Fever	0	0.2	0	22	29.6	22
Zika Virus***	0	1	0	4	19.2	8
Other	2017	Mean*	Median*	2017	Mean*	Median*
Legionellosis	6	5.2	4	230	176.4	183
Aseptic meningitis	2	13.8	15	414	451.8	461

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change \*Timeframe of 2011-2017\*\*Includes January through current month. \*\*\* As of December 15, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 65.

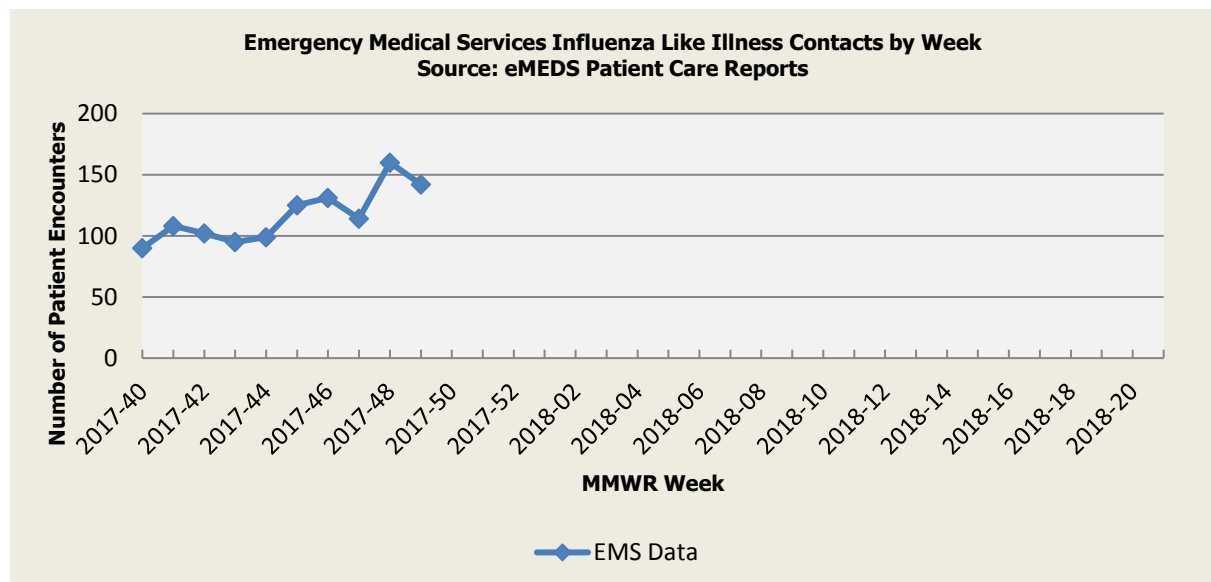
## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 49 was: Regional Geographic Spread with Minimal Intensity.



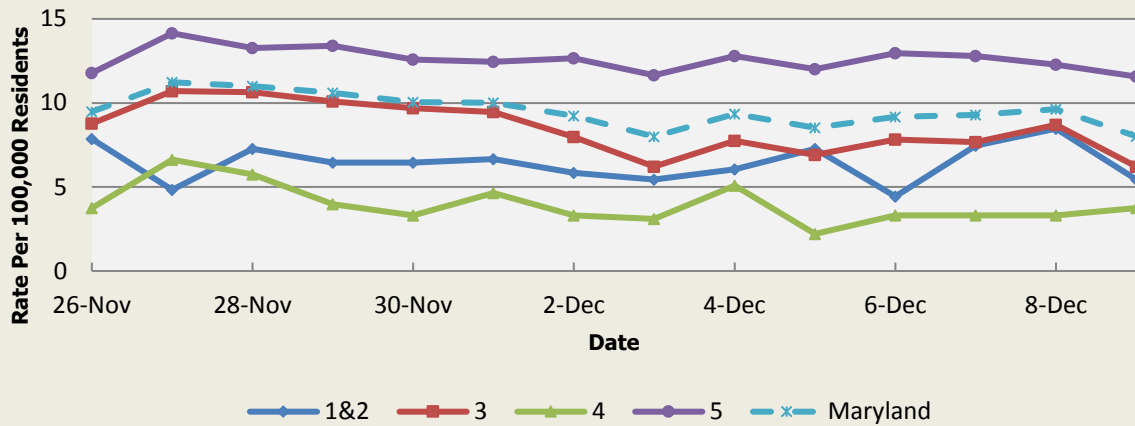
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.68	12.99	11.92	11.23	11.96
Median Rate*	7.66	9.63	9.05	8.51	9.00

\* Per 100,000 Residents



**Disclaimer on eMEDS flu related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

**Over-the-Counter Medication Sales Related to Influenza  
Rate Per 100,000 Residents**

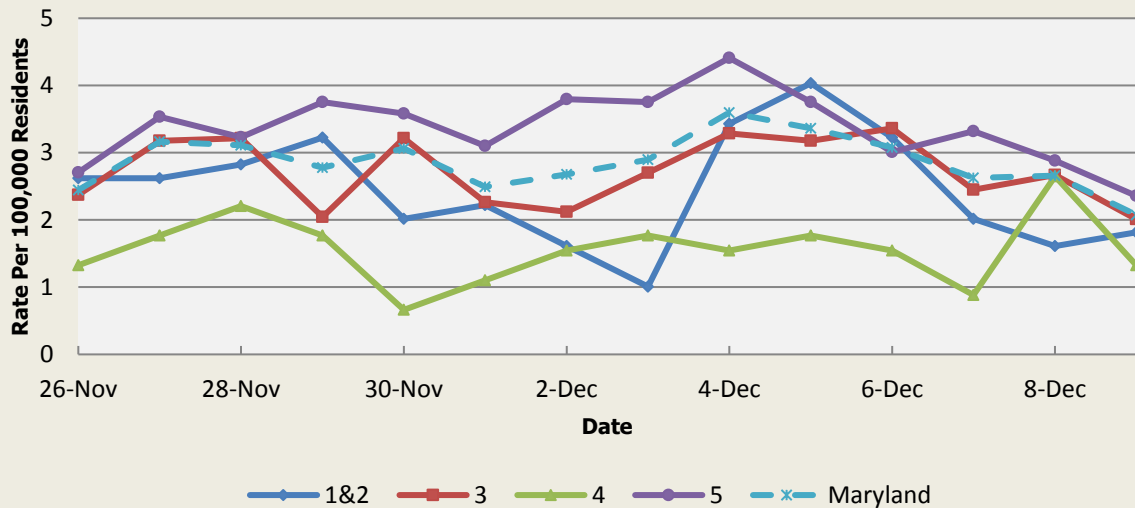


There was an appreciable increase above baseline in the rate of OTC medication sales on 11/13 (Region 3) during this reporting period. This increase is not known to be associated with any outbreaks.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.70	4.82	2.72	8.28	5.90
Median Rate*	3.23	4.38	2.43	8.03	5.52

\* Per 100,000 Residents

**Over-the-Counter Thermometer Sales  
Rate Per 100,000 Residents**



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

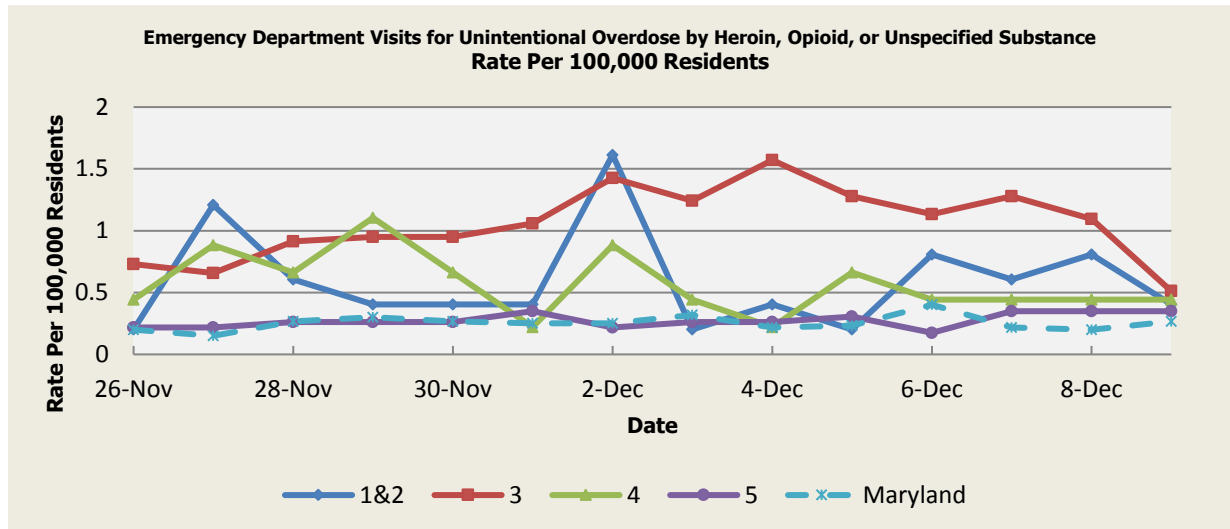
Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.22	3.12	2.43	4.12	3.46
Median Rate*	3.02	3.03	2.43	4.06	3.36

\* Per 100,000 Residents



## SYNDROMIC OVERDOSE SURVEILLANCE

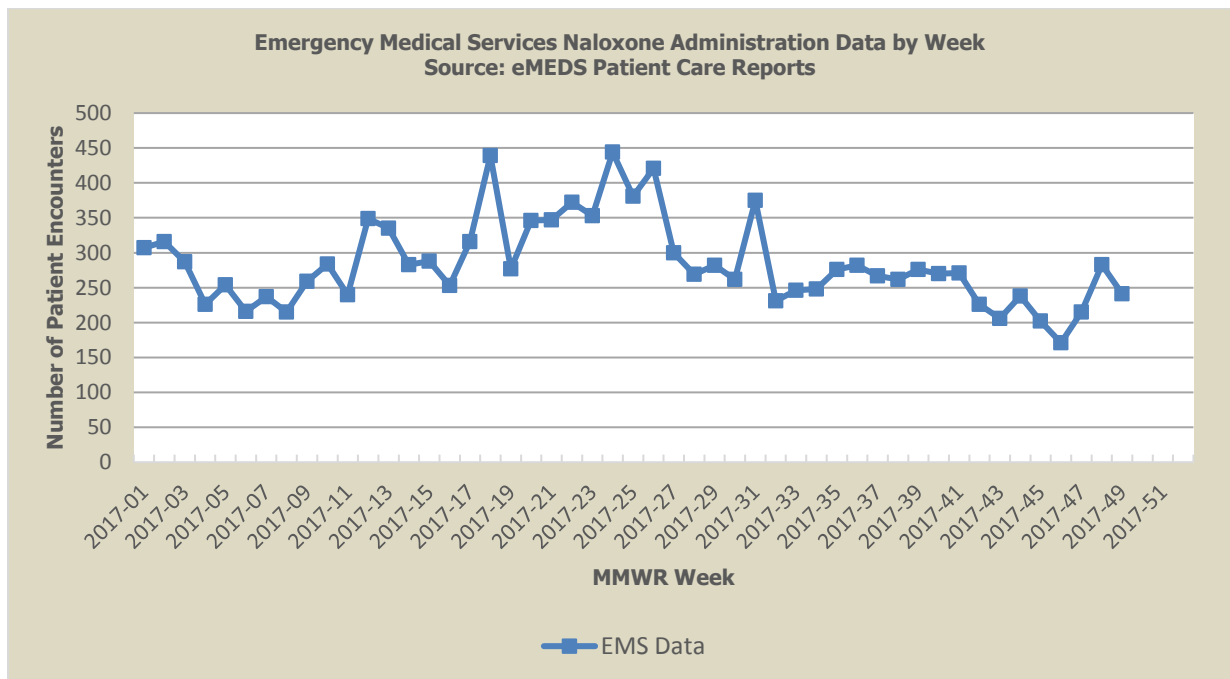
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.



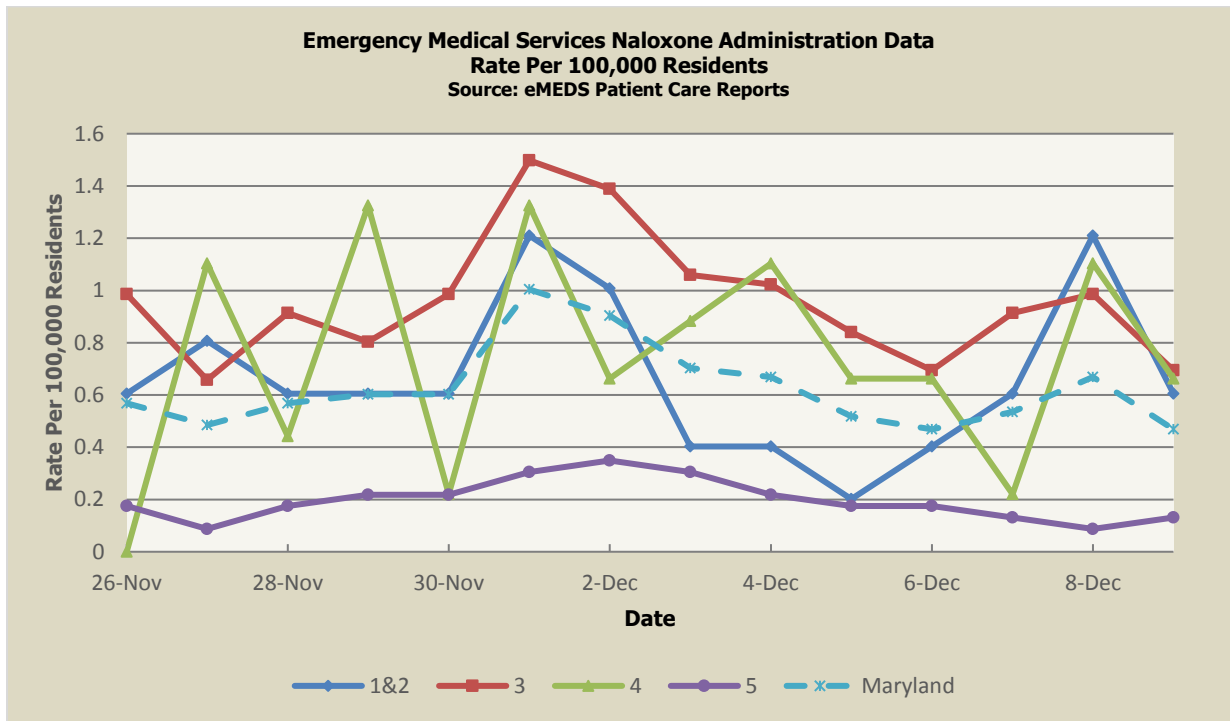
**Disclaimer on ESSENCE Overdose related data:** ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.39	0.34	0.14	0.28
Median Rate*	1.01	1.32	1.10	0.48	0.99

\* Per 100,000 Residents



**Disclaimer on eMEDS naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



**Disclaimer on eMEDS Naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.39	0.34	0.14	0.28
Median Rate*	1.01	1.32	1.10	0.48	0.99

\* Per 100,000 Residents

## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase:** This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of October 30, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

### **AVIAN INFLUENZA**

**AVIAN INFLUENZA (ASIA, EUROPE, MIGRATORY BIRDS, POULTRY, HPAI H5N6, RESEARCH)** 12 Dec 2017, The Animal and Plant Quarantine Agency of the Republic of Korea and the OIE/FAO/EU International Reference Laboratory at APHA-Weybridge, UK have characterized a novel emerging highly pathogenic avian influenza A(HPAI) (H5N6) virus isolated from both wild birds and domestic poultry in the Republic of Korea. There was one case of H5N6 HPAI in a broiler duck farm in Jeonbuk province. In addition, one H5N6 virus was isolated from wild birds on Jeju Island. Read More: <https://www.promedmail.org/post/5498935>

**AVIAN INFLUENZA (CAMBODIA, KAMPONG CHAM, POULTRY, HPAI H5N1)** 09 Dec 2017, The Cambodian Ministry of Agriculture, Forestry and Fisheries has reported that in early December 2017 the bird flu (H5N1 virus) appeared in Kampong Cham province. The ministry informed Prime Minister Hun Sen on Fri 8 Dec 2017, of the outbreak. Prey Chor district's [map at <https://tinyurl.com/ybsklyly>] Trapaeng Preah commune was hardest hit, with some 200 chickens perishing. After the alert from local authorities, the ministry immediately dispatched experts to inspect the site in Trapaeng Preah, and they took away 2 dead chickens to be sent to a laboratory in Phnom Penh. "The tests on [Wed 6 Dec 2017] confirmed that those chickens had contracted the avian influenza H5N1," the lab report said. Read More: <https://www.promedmail.org/post/5493410>

**AVIAN INFLUENZA (NETHERLANDS, FLEVOLAND, POULTRY, HPAI H5N6, GENOTYPED)** 09 Dec 2017, The Dutch Ministry of Agriculture, Nature and Food Quality imposed an immediate indoor confinement for Dutch poultry after the detection of avian influenza at a meat ducks farm in Biddinghuizen, province of Flevoland, on Fri 8 Dec 2017. The bird flu of the H5 type is probably of a highly pathogenic variant. To prevent the virus from spreading, all birds on the affected farm, around 16 000 meat ducks will be killed by the Netherlands Food and Consumer Product Safety Authority (NVWA). There are 4 other poultry farms in an area of 3 kilometers [1.86 miles] surrounding the infected farm in Biddinghuizen. These farms are also examined on the presence of avian influenza. Read More: <https://www.promedmail.org/post/5493234>

### **HUMAN AVIAN INFLUENZA**

*No Human Avian Influenza cases reported this period.*

### **NATIONAL DISEASE REPORTS**

*For National Disease Reports, please visit [www.promedmail.org](http://www.promedmail.org).*

## **INTERNATIONAL DISEASE REPORTS**

*For International Disease Reports, please visit [www.promedmail.org](http://www.promedmail.org).*

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR).

More data and information on influenza can be found on the MDH website:  
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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## Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

## Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

